

Regulated Lag Pulse-Start Metal Halide Ballast

Premium Lamp/Ballast System Performance For Long Burning HID Applications

Only From
Advance

PRODUCT PROFILE



Definition

Advance Transformer's Regulated Lag ballasts for pulse-start metal halide lamps are specifically designed to provide long lamp life, improved lumen maintenance, and voltage-dip tolerance to meet the lighting needs of heavy industry. Superior lamp wattage control is achieved within the ballast by the inclusion of a regulation sub-circuit consisting of a capacitor across a third ballast coil. Because the ballast is a lag design, the lamp current waveform is virtually a sine wave keeping the crest factor below 1.5 (vs. 1.8 of the lead-peak CWA ballasts used with traditional probe-start lamps). The lamp wattage regulation is 10:4—a 10% change in line voltage results in only a 4% change in lamp wattage. Voltage dips of up to 50% are possible without lamp dropout. Limiting lamp wattage excursion and reducing the lamp current crest factor lead to long lamp life with high lumen maintenance and excellent color control. These characteristics make the Advance Regulated Lag ballast ideal for situations where lamps are operated on long or continuous burning cycles, lamp change-out costs are high, long runs are present, or where large voltage dips are possible.

Pulse-start ballasts utilize a separate ignitor to start the lamp. The addition of the ignitor to the metal halide ballast circuit fostered the development of pulse-start lamps and ballasts, a lighting system significantly superior to the original probe-start metal halide technology. The Advance Regulated Lag ballast's superior characteristics further improve the performance of pulse-start lamps such that metal halide is now competitive with high pressure sodium in even the most demanding applications.

Advance Regulated Lag ballasts for metal halide lamps are available for most popular wattages and system voltages. Refer to the ballast specifications on the reverse side for details.

Description

- Premium performance 3-coil ballast
- 175, 200, 250, and 400 watt pulse-start lamp operation
- Maximizes lamp life (up to 40,000 hours continuous burn)
- Improves color consistency (+/- 200°k color control over life)
- Lifecycle cost-efficient white light

Features and Benefits

Feature	Benefit
Low 1.5 crest factor and premium lamp wattage regulation	<ul style="list-style-type: none">• Up to twice the lamp life of a conventional metal halide system for reduced maintenance costs.• Greater consistency in lamp-to-lamp output and color for better quality light.• Minimizes impact of high or low system voltages that may be associated with heavily varying loads, heavily loaded circuits and/or long runs.
Improved lumen maintenance	Fewer fixtures required.
50% voltage dip withstand	Lamps stay lit in applications where larger voltage fluctuations are present.

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Advance Regulated Lag Ballast Specifications

with potted ignitor and oil-filled capacitor, 60hz, min. starting temperature -40°F/-40°C

INPUT VOLTS	CATALOG† NUMBER	MAX WATTS INPUT	NOM. OPEN INPUT CURRENT	FUSE CIRCUIT VOLTAGE	RATING (AMPS)	CORE & COIL DIMENSIONS			NON-PCB OIL-FILLED CAPACITOR				TOTAL WEIGHT (LBS)	IGNITOR		U.L. BENCH TOP RISE CODE 1029_
						FIG	A	B	MFD	MIN VOLT	DIA. (IN)	HT. (IN)		PART NUMBER	MAX. DIST. TO LAMP (FT)	
175 WATT LAMP, ANSI CODE M-137																
120	71A5504	220	2.00	310	5	3	1.70	3.5	17	400	1.75	3.40	12.5	LI534-H5	2	A
277	71A5534-T		.85		2											
347	71A55B4-T		.70		2											
480	71A5544-T		.50		1											
200 WATT LAMP, ANSI CODE M-136																
277	71A5634-T	244	.90	305	3	3	2.00	3.7	17	400	1.75	3.40	15.0	LI534-H5	2	A
250 WATT LAMP, ANSI CODE M-138																
120	71A5704	298	2.75	305	8	3	2.50	4.2	16	480	1.75	3.40	16.0	LI534-H5	2	A
240	71A5724-T		1.40		4											
277	71A5734-T		1.20		3											
347	71A57B4-T		.95		3											
480	71A5744-T		.70		2											
400 WATT LAMP, ANSI CODE M-128 & M-135																
120	71A6004	465	3.95	315	10	3	3.75	5.5	21	500	1.75	3.90	26.0	LI534-H5	2	A
208/240	71A60E4-T		2.30/2.00		6/5											
277	71A6034-T		1.70		5											
347	71A60B4-T		1.35		4											
480	71A6044-T		1.00		4											
50Hz 230	71A60S4-T	472	2.10	310	6	3	4.05	5.9	32	480	1.75	5.30	27.0	LI534-H5	2	B

[†]Ordering information – add proper suffix to catalog number

-500 includes core & coil with oil-filled capacitor

-600 core & coil only, no capacitor

Note: -T denotes 120volt output tap for quartz stand-by lighting

Dimensions

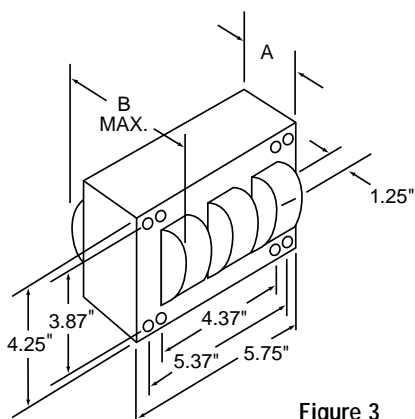
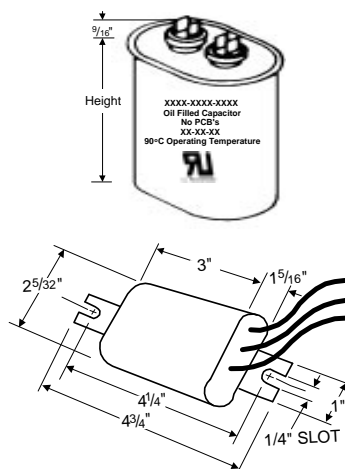
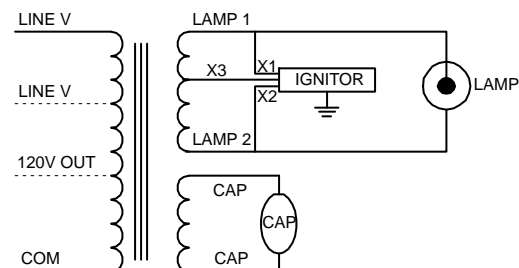


Figure 3
41/4" x 53/4" Core

Capacitor and Ignitor



Wiring Diagram



Specifications subject to change without notice.
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